

PAGE: 1

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/164,223

OIPE

0360  
DATE: 10/14/98  
TIME: 11:54:45

Input Set: I164223.RAW

This Raw Listing contains the General Information  
Section and up to first 5 pages.

new format

ENTERED

1 <110> APPLICANT: Gaiger, Alexander  
2 Cheever, Martin A.  
3 <120> TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR WT1 SPECIFIC IMMUNOTHERAPY  
4 <130> FILE REFERENCE: 210121.465  
5 <140> CURRENT APPLICATION NUMBER: US/09/164,223  
6 <141> CURRENT FILING DATE: 1998-09-30  
7 <160> NUMBER OF SEQ ID NOS: 320  
8 <170> SOFTWARE: PatentIn Ver. 2.0  
9 <210> SEQ ID NO 1  
10 <211> LENGTH: 17  
11 <212> TYPE: PRT  
12 <213> ORGANISM: Homo sapiens  
13 <400> SEQUENCE: 1  
14 Arg Asp Leu Asn Ala Leu Leu Pro Ala Val Pro Ser Leu Gly Gly Gly  
15 1 5 10 15  
16 Gly  
17 <210> SEQ ID NO 2  
18 <211> LENGTH: 23  
19 <212> TYPE: PRT  
20 <213> ORGANISM: Homo sapiens  
21 <400> SEQUENCE: 2  
22 Pro Ser Gln Ala Ser Ser Gly Gln Ala Arg Met Phe Pro Asn Ala Pro  
23 1 5 10 15  
24 Tyr Leu Pro Ser Cys Leu Glu  
25 20  
26 <210> SEQ ID NO 3  
27 <211> LENGTH: 23  
28 <212> TYPE: PRT  
29 <213> ORGANISM: Mus musculus  
30 <400> SEQUENCE: 3  
31 Pro Ser Gln Ala Ser Ser Gly Gln Ala Arg Met Phe Pro Asn Ala Pro  
32 1 5 10 15  
33 Tyr Leu Pro Ser Cys Leu Glu  
34 20  
35 <210> SEQ ID NO 4  
36 <211> LENGTH: 19  
37 <212> TYPE: PRT  
38 <213> ORGANISM: Homo sapiens  
39 <400> SEQUENCE: 4  
40 Gly Ala Thr Leu Lys Gly Val Ala Ala Gly Ser Ser Ser Ser Val Lys  
41 1 5 10 15  
42 Trp Thr Glu  
43 <210> SEQ ID NO 5  
44 <211> LENGTH: 22

PAGE: 2

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/164,223DATE: 10/14/98  
TIME: 11:54:45

Input Set: I164223.RAW

45	<212> TYPE: DNA	
46	<213> ORGANISM: Homo sapiens	
47	<400> SEQUENCE: 5	22
48	gagagtcaga cttgaaagca gt	
49	<210> SEQ ID NO 6	
50	<211> LENGTH: 20	
51	<212> TYPE: DNA	
52	<213> ORGANISM: Homo sapiens	
53	<400> SEQUENCE: 6	20
54	ctgagcctca gcaaattgggc	
55	<210> SEQ ID NO 7	
56	<211> LENGTH: 27	
57	<212> TYPE: DNA	
58	<213> ORGANISM: Homo sapiens	
59	<400> SEQUENCE: 7	27
60	gagcatgcat gggctccgac gtgcggg	
61	<210> SEQ ID NO 8	
62	<211> LENGTH: 25	
63	<212> TYPE: DNA	
64	<213> ORGANISM: Homo sapiens	
65	<400> SEQUENCE: 8	25
66	ggggtaccca ctgaacgggc cccga	
67	<210> SEQ ID NO 9	
68	<211> LENGTH: 18	
69	<212> TYPE: DNA	
70	<213> ORGANISM: Mus musculus	
71	<400> SEQUENCE: 9	18
72	tccgagccgc acctcatg	
73	<210> SEQ ID NO 10	
74	<211> LENGTH: 18	
75	<212> TYPE: DNA	
76	<213> ORGANISM: Mus musculus	
77	<400> SEQUENCE: 10	18
78	gcctgggatg ctggactg	
79	<210> SEQ ID NO 11	
80	<211> LENGTH: 27	
81	<212> TYPE: DNA	
82	<213> ORGANISM: Mus musculus	
83	<400> SEQUENCE: 11	27
84	gagcatgcga tgggttccga cgtgcgg	
85	<210> SEQ ID NO 12	
86	<211> LENGTH: 29	
87	<212> TYPE: DNA	
88	<213> ORGANISM: Mus musculus	
89	<400> SEQUENCE: 12	29
90	ggggtacctc aaagcgccac gtggagttt	
91	<210> SEQ ID NO 13	
92	<211> LENGTH: 17	
93	<212> TYPE: PRT	
94	<213> ORGANISM: Mus musculus	

PAGE: 3

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/164,223DATE: 10/14/98  
TIME: 11:54:45

Input Set: I164223.RAW

95 <400> SEQUENCE: 13  
96 Arg Asp Leu Asn Ala Leu Leu Pro Ala Val Ser Ser Leu Gly Gly Gly  
97 1 5 10 15  
98 Gly  
99 <210> SEQ ID NO 14  
100 <211> LENGTH: 19  
101 <212> TYPE: PRT  
102 <213> ORGANISM: Mus musculus  
103 <400> SEQUENCE: 14  
104 Gly Ala Thr Leu Lys Gly Met Ala Ala Gly Ser Ser Ser Ser Val Lys  
105 1 5 10 15  
106 Trp Thr Glu  
107 <210> SEQ ID NO 15  
108 <211> LENGTH: 15  
109 <212> TYPE: PRT  
110 <213> ORGANISM: Homo sapiens  
111 <400> SEQUENCE: 15  
112 Arg Ile His Thr His Gly Val Phe Arg Gly Ile Gln Asp Val Arg  
113 1 5 10 15  
114 <210> SEQ ID NO 16  
115 <211> LENGTH: 15  
116 <212> TYPE: PRT  
117 <213> ORGANISM: Mus musculus  
118 <400> SEQUENCE: 16  
119 Arg Ile His Thr His Gly Val Phe Arg Gly Ile Gln Asp Val Arg  
120 1 5 10 15  
121 <210> SEQ ID NO 17  
122 <211> LENGTH: 14  
123 <212> TYPE: PRT  
124 <213> ORGANISM: Mus musculus  
125 <400> SEQUENCE: 17  
126 Val Arg Arg Val Ser Gly Val Ala Pro Thr Leu Val Arg Ser  
127 1 5 10  
128 <210> SEQ ID NO 18  
129 <211> LENGTH: 14  
130 <212> TYPE: PRT  
131 <213> ORGANISM: Homo sapiens  
132 <400> SEQUENCE: 18  
133 Val Arg Arg Val Pro Gly Val Ala Pro Thr Leu Val Arg Ser  
134 1 5 10  
135 <210> SEQ ID NO 19  
136 <211> LENGTH: 15  
137 <212> TYPE: PRT  
138 <213> ORGANISM: Homo sapiens  
139 <400> SEQUENCE: 19  
140 Cys Gln Lys Lys Phe Ala Arg Ser Asp Glu Leu Val Arg His His  
141 1 5 10 15  
142 <210> SEQ ID NO 20  
143 <211> LENGTH: 15  
144 <212> TYPE: PRT

PAGE: 4

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/164,223

DATE: 10/14/98  
TIME: 11:54:45

Input Set: I164223.RAW

```

145 <213> ORGANISM: Mus musculus
146 <400> SEQUENCE: 20
147     Cys Gln Lys Lys Phe Ala Arg Ser Asp Glu Leu Val Arg His His
148         1             5             10             15
149 <210> SEQ ID NO 21
150 <211> LENGTH: 21
151 <212> TYPE: DNA
152 <213> ORGANISM: Mus musculus
153 <400> SEQUENCE: 21
154     cccaggctgc aataagagat a
155 <210> SEQ ID NO 22
156 <211> LENGTH: 21
157 <212> TYPE: DNA
158 <213> ORGANISM: Mus musculus
159 <400> SEQUENCE: 22
160     atgttgtgat ggcggaccaa t
161 <210> SEQ ID NO 23
162 <211> LENGTH: 20
163 <212> TYPE: DNA
164 <213> ORGANISM: Homo sapiens
165 <400> SEQUENCE: 23
166     gtggggcgcc ccaggcacca
167 <210> SEQ ID NO 24
168 <211> LENGTH: 24
169 <212> TYPE: DNA
170 <213> ORGANISM: Homo sapiens
171 <400> SEQUENCE: 24
172     gtccttaatg ctacgcacga tttc
173 <210> SEQ ID NO 25
174 <211> LENGTH: 21
175 <212> TYPE: DNA
176 <213> ORGANISM: Homo sapiens
177 <400> SEQUENCE: 25
178     ggcattctgag accagtgaga a
179 <210> SEQ ID NO 26
180 <211> LENGTH: 21
181 <212> TYPE: DNA
182 <213> ORGANISM: Homo sapiens
183 <400> SEQUENCE: 26
184     gctgtccac ttacagatgc a
185 <210> SEQ ID NO 27
186 <211> LENGTH: 21
187 <212> TYPE: DNA
188 <213> ORGANISM: Homo sapiens
189 <400> SEQUENCE: 27
190     tcaaagcgcc agctggagtt t
191 <210> SEQ ID NO 28
192 <211> LENGTH: 9
193 <212> TYPE: PRT
194 <213> ORGANISM: Homo sapiens

```

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/164,223DATE: 10/14/98  
TIME: 11:54:45

PAGE: 5

Input Set: I164223.RAW

195 <400> SEQUENCE: 28  
196 Ala Ala Gly Ser Ser Ser Ser Val Lys  
197 1 5  
198 <210> SEQ ID NO 29  
199 <211> LENGTH: 9  
200 <212> TYPE: PRT  
201 <213> ORGANISM: Homo sapiens  
202 <400> SEQUENCE: 29  
203 Ala Ala Gln Phe Pro Asn His Ser Phe  
204 1 5  
205 <210> SEQ ID NO 30  
206 <211> LENGTH: 9  
207 <212> TYPE: PRT  
208 <213> ORGANISM: Homo sapiens  
209 <400> SEQUENCE: 30  
210 Ala Glu Pro His Glu Glu Gln Cys Leu  
211 1 5  
212 <210> SEQ ID NO 31  
213 <211> LENGTH: 9  
214 <212> TYPE: PRT  
215 <213> ORGANISM: Homo sapiens  
216 <400> SEQUENCE: 31  
217 Ala Gly Ala Cys Arg Tyr Gly Pro Phe  
218 1 5  
219 <210> SEQ ID NO 32  
220 <211> LENGTH: 9  
221 <212> TYPE: PRT  
222 <213> ORGANISM: Homo sapiens  
223 <400> SEQUENCE: 32  
224 Ala Gly Ser Ser Ser Ser Val Lys Trp  
225 1 5  
226 <210> SEQ ID NO 33  
227 <211> LENGTH: 9  
228 <212> TYPE: PRT  
229 <213> ORGANISM: Homo sapiens  
230 <400> SEQUENCE: 33  
231 Ala Ile Arg Asn Gln Gly Tyr Ser Thr  
232 1 5  
233 <210> SEQ ID NO 34  
234 <211> LENGTH: 9  
235 <212> TYPE: PRT  
236 <213> ORGANISM: Homo sapiens  
237 <400> SEQUENCE: 34  
238 Ala Leu Leu Pro Ala Val Pro Ser Leu  
239 1 5  
240 <210> SEQ ID NO 35  
241 <211> LENGTH: 9  
242 <212> TYPE: PRT  
243 <213> ORGANISM: Homo sapiens  
244 <400> SEQUENCE: 35

PAGE: 6

VERIFICATION SUMMARY  
PATENT APPLICATION US/09/164,223

DATE: 10/14/98  
TIME: 11:54:45

Input Set: I164223.RAW

Line ? Error/Warning

Original Text